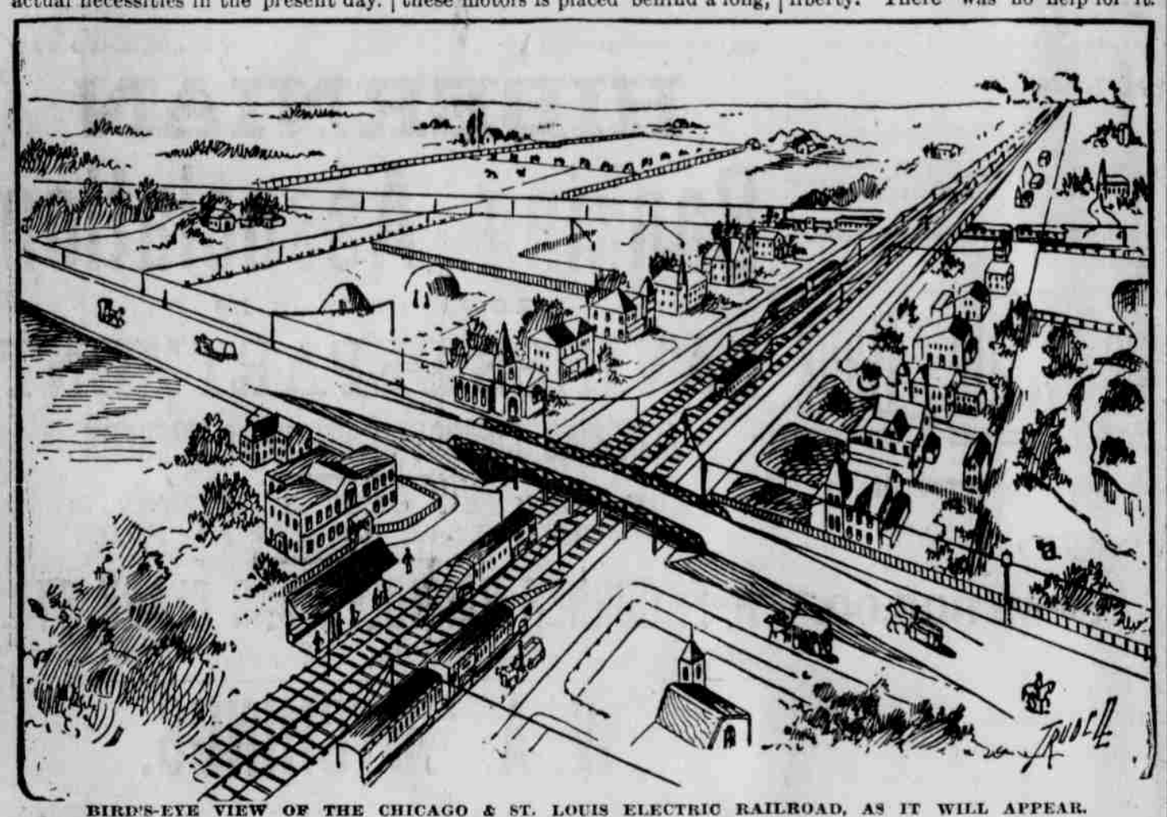
DREAM OF A CENTURY.

'TIS THOUGHT IT WILL SOON BE REALIZED.

An Electric Railroad Between Chicago and St. Louis Upon Which a Speed of One Hundred Miles an Hour Will Be Made.

Will Go Like the Wind.

When Ben Franklin discovered that electricity could be conveyed along a wire he had conferred upon humanity a boon, the importance of which even he could not realize. Little idea had he of the coming telegraph, the first manifestation of the new-found law, nor of the telephone, the electric motor, electric light and many other things which seem to be actual necessities in the present day.



BIRD'S-EYE VIEW OF THE CHICAGO & ST. LOUIS ELECTRIC RAILROAD, AS IT WILL APPEAR.

These things were to come later. Of course, we cannot tell what were the thoughts that animated that brain as the lightning flash followed with marvelous speed the delicate thread by which he held his kite in the storm. But however wild his imaginings were, could he have seen a vision of the wonders of the after part of the nineteenth century, those wonders to which he held the key?

One Hundred Miles an Hour.

Not the least of these wonders are the electric motor and the dynamo which manufactures lightning. By their combination distance can almost be annihilated. What would have been thought 100 years ago of the person rash enough to predict a speed of 100 miles an hour with which men and things could be transported from one point to another? The development of transportation facilities since George Stephenson's locomotive made its trial trip in 1829 has been remarkable. What is perhaps the last step of the century in this direction is about to be taken. An electric railroad is already under way between Chicago and St. Louis which it would seem will solve the problem of rapid transit. On this railroad, at the very start a speed of 100 miles an hour will be made.

A Description.

The line between the two great cities will be as near straight as the lay of the land will allow. It will be divided into 25 sections of 10 miles each, and the power will be furnished from power houses along the line and situated at coal mines owned by the company. These power houses will not only give power to the railroad but will also supply cities and individuals along the line with light, heat, and power. The railroad itself will at first consist of two tracks, but eventually two more will be constructed. There are to be no grade crossings.

In cases of country roads, the latter will be thrown up over the railroad by means of wooden bridges. When other railroads are to be crossed, the electric road will be elevated. These

RAILROAD CROSSING.

[Showing how the electric road will be run across a steam railroad by means of an iron bridge. Nineteen of these bridges must be built between the terminal of the electric railways.]

crossings will be made by iron bridges. The entire line from Chicago to St. Louis will be inclosed by a high fence. These precautionary measures will eliminate the danger of those accidents resulting from an open line and grade crossings. Other accidents, such as collisions between trains, will be practically impossible. The power will be communicated to the motors of the cars by means of the familiar trolley system. The details methods

power will be shut off from alternate sections, thus preventing two trains from running on the same track within at least ten miles of each other. As only trains going in the same direction will use the same track there can positively be no collision. The danger of jumping the track is practically eliminated by the center of gravity of the cars being placed very low.

The Cars.

The coach will be strongly and compactly built, long and low and of light weight. The motors and passenger, mail, and express compartments will all be in one car, the entire weight coming upon four drive wheels, making the traction perfect. Each pair of wheels is driven by a separate motor. The forward of these motors is placed behind a long, tapering nose, so constructed that the air can be cut with the least possible friction. The drive wheels are six feet in diameter, and are capable of making 500 revolutions a minute. The axles will be run on roller bearings so that friction will be brought down to a minimum. The top of the car will be but nine feet from the rail, and as the axles are placed on high trucks the center of gravity is brought very low. The weight of the car and its equipment will not exceed fifteen tons. Through trains will be run without stops. The

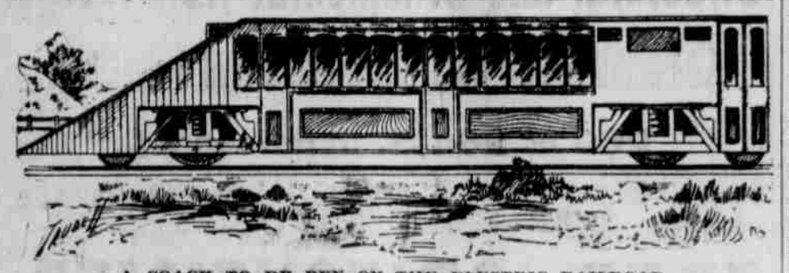
WAGON ROAD CROSSING.

[The manner in which a country road will be made to cross the line of the electric railway by means of a wooden bridge. It is estimated that about 250 of these will be requrired between Chicago and St. Louis.]

schedule time of these trains will be two hours and thirty minutes. Trains will be run every hour; oftener if necessary. There will also be trains running every half-hour or so.

The Power House.

It is estimated that two power houses will be sufficient to furnish all the power necessary. These will be situated at coal mines owned by the company, as already stated, a most



A COACH TO BE RUN ON THE ELECTRIC RAILROAD.

important arrangement in the matter of economy, for not only will the cost of transportation of the coal used in the power houses be dispensed with but the dust of the mines can be burned under the boilers and the good coal sold. This dust is at present wasted wherever coal is mined. The operations of mining will be carried on by means of electric machinery run by power from the power houses.

Terminal privileges have been obtained, the right of way for almost the entire line has been secured, and the line has been surveyed. It is thought that the road will be in operation during the latter part of the World's Fair.

One of the cuts represents the car or coach. In front, just back of the sharp nose, stands the motorman, who controls the train by means of a keyboard in front of him. Just back of the motorman's compartment is one for high class express, and then comes the coach proper. Back of this is a compartment for mail and then the rear motor is reached. Elevated crossings are also depicted in two other illustrations. One of these shows the manner in which a wagon road crossing is thrown up over the tracks, while the other gives an idea of the way other railroads will be crossed by the electric road.

PERHAPS, after all, the Gould millions are to be dissipated. George Gould has developed an ambition to own a racing stable.

IT DOESN'T take any capital to start a Mexican revolution. And when

A Bandit's Courtesy.

Cardinal Theodoli, the intendant of St. Peter's at Rome, who had just died, led, for the most part, a life of clerical tranquility: but he was fond of narrating one thrilling adventure. It was in 1874. Monsignor Theodoli was spending a quiet holiday at the abbey of Trivulsi, near Frosinone. While reposing under a chestnut tree in a neighboring wood one afternoon he was captured by bandits and carried off to the mountain-top. His servant, who came in search of him, shared a like fate. In the morning the chief approached the bishop respectfully, and, with many apologies for the necessity which he was under, informed him that they required £2,000, which his servant could bring back, and then he would be set at liberty. There was no help for it. The servant was sent and returned. The captive was freed, and the brigands implored his pardon, saying misery had driven them to their mode of life, and protesting that they were good Christians. The heart of the bishop was softened. He gave them his blessing. The chief seized his hand and kissed it fervently, but in doing so contrived to abstract the pastoral ring. In justice, though, it should be said that about a year later, as the bishop was one day crossing the bridge of St. Angelo from St. Peter's, an individual unknown to him thrust a packet into his hand. It contained the ring.—Tit-Bits.

The Japanese.

The Japanese leave in the traveler's mind the memory of courtesy and grace, but even more deeply marked is the memory of their versatility and their energy. All men, he has learned, may be polite; cabmen and prisoners may be gentlemen. I never saw more grace than was shown in the courtesy which passed between the Governor of the prison at Kioto and a female prisoner. But the chief lesson taught in Japan is man's versatility. Man's energy is indomitable, and his history in Japan repeats the lesson enforced by the Jewish prophets, that though only a remnant, a stump, be left, yet out of that stump may grow branches and leaves in which generations may rest. Thirty years ago men who have now the language and habits of highly cultivated civil servants were swaggering with two swords and witnesses of hara kiri. A generation ago Japan was where England was 300 years ago, but by energy and versatility Japan, in science, education, knowledge and history, now takes its place alongside the foremost nations. This is the more remarkable because religion seems to have had no place in the development. "No one is religious; I believe in nothing; I believe in myself," expresses the attitude of young Japan. The Japanese are curiously deficient in the religious sense; they have never made friends with sorrow; they have hid sorrow behind a ceremony and waved off care with a blossom branch. They have missed therefore religion, which is sorrow's consolation, and have missed perhaps also the impulse which would make them original as well as energetic.—The Nineteenth Century.

In Novel Guise.

An old game in a new form is finding favor in society. It is called blind girl's bluff, and this is the way it is done. The pretty buffer is blindfolded by means of a long, black mask, which effectually keeps her from gazing underneath. She is then seated in the middle of the room, while the company, joining hands, slowly walk around her. High above her head the buffer flourishes a weapon not unlike the shield which the darkies down South use for protection against flies and musquitoes. As the mystic circle silently passes around the blindfolded enchantress, the latter brings down her wand lightly upon the head of any one whom its aim may concern. He quickly catches it, kisses the hand of the queen of the mask, and takes his place upon the throne, when he in turn sways the scepter. Should a young woman be touched with the wand she embraces her ex-queen and tries her own hand with the wand. The game is made interesting by the announcement that should the queen fall in three strokes to touch one of her subjects she is presented later on with the court jester's paper cap and bells. And should any subject be so fortunate as to be three times chosen she is given a jubilee and is awarded

VAST INTERESTS.

Some Figures and Comparisons make by Poor's Manual of Railroads.

Poor's Manual of the Railroads of the United States for 1892 contains as usual a vast amount of information inaccessible from other sources. Some of the figures are mere words, however, unless comparison is made with familiar amounts. It appears, for instance, that there were 170,601 miles of railroad track in the United States at the close of 1891. This would nearly encircle the world seven times if laid in straight lines. If all the tracks were laid between Chicago and New York there would be over 200 complete through lines between the cities. They would take up a ground space over half a mile wide and about 900 miles long.

The liabilities of these lines amount to $10,765,626,041 and their total assets to $11,110,335,276. The railroads of the United States owe more than six times as much as the government but hold property worth $344,709,235 more than their debts. According to the Vanderbilt standard $7,000 is not a great amount of money, but it means comfort in old age to almost anyone. If every man, woman and child of every age, sex or previous condition of servitude in Chicago were to make an outright present each of $7,000 in cash to the railroads, it would just about pay their debts. Poor's Manual doesn't say so, but other figures show these vast assets and liabilities involve the bread and butter of over six millions of persons in the United States. One person in eleven in the United States gains his living through railroads. They furnish employment to more persons than any other industry except agriculture. It makes a person wonder what in the world this vast number of people could have done for a living had railroads not been invented.

It appears there was a total train mileage during 1891 of 831,202,376. In other words, if the running of all trains had been done by one train it would have traveled 831,202,376 miles. This would complete the circuit of the earth 34,633 times a year, or in the neighborhood of a hundred times a day. The New York Central flyer between New York and Buffalo made the distance of 436 miles in 425 minutes. Had the hypothetical mileage train started on a parallel track with the New York Central train when it made its world-beating record it would have jogged around the world and passed the New York Central train nearly forty times before the latter reached Buffalo. The hypothetical train would have made forty times 24,000 miles while the more than a-mile-a-minute flyer was making 436 miles. Pretty fast traveling, that.

During 1891 there were 556,015,802 people carried a distance of 13,316,925,239 miles by railroad in the United States. That is equivalent to every human being in the United States having traveled 200 miles by railroad during the year. Have you ridden your share? Suppose every person in Chicago, including Captain Streeter and Commodore Yattaw, had each shouldered a ton of miscellaneous stuff and started around the world with it. Grant that every centenarian and babe in arms within the city limits was able to carry the ton equally with the balance of the 1,399,998 people. Grant also that they could carry the ton nearly two and a half times around the world during the year. As a result of these two drains on the imagination you will have the equal of the 81,210,154,523 tons of freight carried one mile.

Railroads showed revenues of $457,504,066, with a balance of $40,250,722, during the year. How much of this balance is profit is a question which the payment of floating debts, vouchers, commissions and rebates can alone decide. Probably not half and possibly not a tenth of the forty millions of balance can be counted as net profit.

A GAMBLER STARTS A CHURCH

A True Incident of Life in Creede Mining Camp.

Creede Camp, Colo., is at present a perfect whirlpool of excitement. Rich mines are being discovered every day, and the town is full of gamblers reaping a rich harvest. Each day brings in a hundred people, among them the very good and the very bad. On one side of a narrow street is a richly furnished saloon, and across the narrow street is an undertaking establishment, each displaying a flaring sign. Usually no regard is paid to the Sabbath, and in the wild rush there are few thoughts of the spiritual.

But the champions of Christianity are ever watchful, and a representative of the Christian religion is usually among the first to be on the ground. Soon after the rush to Creede began, a Methodist minister went in with the crowd one day, and the first man to whom he mentioned the matter of desiring to build a church was Browney Lee, a noted San Juan gambler. As a rule, the fraternity are enthusiastic over anything new and are generous to a fault.

Browney invited the preacher to go over to Watrous' saloon with him, and he led the way. On entering the room, in which at least a hundred men were congregated, drinking at the bar or crowded about a dozen faro or keno tables, "bucking the tiger," Browney jumped upon a chair and said: "Boys, here is a preacher and he wants to preach. Now, you fellows let up for a while and let this man have the floor."

It was Sunday, and it was doubtful if those in the saloon had thought of it before. Instantly there was a platform had been erected for a keno case, and he called the caller down and the preacher was told to step up. He did so, and gave them an off-handed talk in true Western style.

Strict attention was paid, and when he had finished, the immense room, which was 30x80 feet in size, was filled. The preacher said that he wanted to build a church in the camp, and told them that he would solicit subscriptions.

Browney got up and said that he knew the boys well, and he would commence right there by passing the hat. He began, and the fellows began dropping quarters and halves. The gambler swore, and said: "D——n it, boys, put in bills. Coins don't go in this hat."

He collected about $90, but did not seem satisfied with the amount. He told the preacher to go and he would attend to it farther. The games were reopened and the gambling went on. Browney took the $90 and bought chips with it and sat at a faro table. He played about an hour and hauled out over $700 and then hunted up the preacher and gave him the winning as a starter for the church.—Great Divide.

Photographic Bullets.

It is no news that cannon balls and bullets can be photographic as they dart through the air, but Professor C. V. Boys has recently made some experiments in photographing flying bullets that cast new light upon their motion, and their effect upon the air through which they pass.

Professor Boys fires the bullet through a box lined with black cloth, and so arranged that the passing bullet itself completes an electric circuit and causes a flash of light in the box, which, though lasting only one-millionth of a second, suffices to imprint a photograph of the bullet on a sensitized plate contained in the box.

Not only are the bullets themselves photographed, but also the atmospheric waves created by their passage. In front of the bullets are seen the waves of condensation, and behind them the waves of rarefaction, and interesting observations have been made on the peculiar forms of these waves.

As each bullet dashes through the box it touches the terminals of two wires in the electric circuit, and the little cloud of dust into which the end of the wires is pulverized also has its image imprinted on the photographic plate.

Professor Boys has experimented with the photographing of charges of small shot fired from shotguns, and the final result of these experiments is awaited with much interest, because it promises to throw light upon the manner in which guns of different pattern scatter the shot.

Juvenility and Prayer.

Willie is the son of a Presbyterian clergyman, and participates in all the functions of the church and prayer meeting, says the New York Evening Sun. Notwithstanding, he is very tardy in getting dressed in the morning, and occasions his mother much annoyance. One morning, her patience being more tried than usual, she said:

"Willie, if you don't stop dawdling while you are getting on your clothes, I will punish you."

Willie accordingly made haste, and when he had finished dressing fell upon his knees to say his morning prayer, to which he added these petitions:

"And, O Lord, keep me from dawdling; but if, Lord, it should be thy will that I should dawdle, grant that mother may be reconciled."

Bishop Brooks—Phillips Brooks, lest the title be unfamiliar—has a little niece, brought up, as a bishop's niece should be, to say her prayers. One night when she had put herself to bed her mother asked her afterward if she had said her prayers.

"No," she said, she had not.

"But why not?" her mother inquired.

"Well," said the little maid, "I was tired and sleepy, so I asked the Lord to excuse me, and he said, 'Certainly, Miss Brooks—with pleasure.'"

A Useful Lady-Bird.

The fruit-growers of California have suffered great losses through the ravages of a species of aphis known there as "cottony cushion scale," but according to Cassell's Magazine, a remedy for the pest has been found in the Australian lady-bird,

Novius koebeli, which preys on the aphis, and has been acclimatized in California. The lady-bird, when full-grown, is about one-eighth of an inch in length. It is chiefly of a dark-red color with black lines and markings, as shown in the illustration which represents the male. In the female the black medial line only extends half-way down the back.

GEORGE FRANCIS TRAIN has entered proceedings against the proprietors of a New York museum because they have refused to let him enter a competitive "fasting match." If George wants to fast why doesn't he stick to Madison Square? He may starve himself to the queen's taste, and to everybody else's if he wants to, and with no objections from anybody.

GEORGE FRANCIS TRAIN is organizing a series of all around the world trips, winding up by visiting the Chicago Exposition. If George can only be kept from lecturing the

NOT ALWAYS CHARMERS.

Such Nonsense Has Been Printed About Snakes' Powers.

A great deal of nonsense has been published, and a great deal more is believed, about snakes. Some most thrilling stories turn upon a power which serpents are credited with of fascinating their victims. This appears to be a superstition. According to Mr. Vincent Richards, mice, birds, dogs, guinea pigs, and other small animals, introduced into a rattlesnake's cage, show little fear, even at first, and afterward none whatever. Smaller birds, after fluttering about till they are tired, end by becoming amusingly familiar with the snakes. Mr. Richards put two rats into a cage containing forty cobras. At the outset the rats' appetites were considerably affected, and they were evidently alarmed. In a short space of time, however, they recovered their spirits and caused considerable commotion among the cobras by running all over their heads and bodies. The snakes resented this familiarity by darting at each other and at imaginary foes. The rats lived and partook of food in the cage for ten or twelve days, when, one after another, they were found dead—"victims, no doubt, of misplaced confidence."

It is still a matter of debate whether snakes are proof against their own poison. The remedies advised for snakebite are of doubtful validity. Because a man recovers after being bitten by a snake and dosed with opium, mercury, ammonia, or what not we must not jump to the conclusion that the treatment has effected a cure. A snake may bite without poisoning. Biting, though in appearance simple enough, consists really of a series of complex movements, following rapidly one upon another in ordered sequence, should any of which be inadequately performed, the victim may not be properly poisoned. Ammonia, alcohol, and making the patient move about are wore than useless; for they increase the action of the circulation, and thereby promote the absorption of the poison. Even permanganate of potash is of no effect unless it is administered within four minutes.

Researches into the nature of the poison, says the Popular Science Monthly, have shown that it resides in some proteid, and that there are three toxic elements—globulin, serum albumen and acid albumen — but wherein the quality consists that gives to these substances, usually so harmless, their poisonous power, is as much in the dark as ever.

Rural Criticism.

Uncle Comfort Pettingill was a man whose opinions were considered well worth listening to by people of Bushby, and when he returned from a month's visit to his married daughter, who lived "daown b'low" in Boston, everybody was anxious to hear what he had to say about the city. "I want t' know, Comfort," said Mr. Augustus Fawcett, a near neighbor, who "dropped in" the night after Uncle Comfort returned, "I want t' know ef ye passed inter 'Gimp an' Hardtack's' shop, whilst ye was daown b'low?"

"Suttin, suttin — a number o' times," replied Mr. Pettingill.

"Well," said Mr. Fawcett, "I sh'd like t' know ef they didn't set up fer a dry goods store ten years or so back?" Or hev I got th' wrong name?"

"They called themselves a dry goods firm, an' do naow," said Uncle Comfort.

"Well, well," remarked Mr. Fawcett, "haow doos it happen they're advertisin' farmin' tools fer sale? Hes some r'lation died an' left 'em a lot on hand? I see their circ'lar in th' 'Farmers' Guide,' when it come las' night. I was pooty sure thet was th' place where niece Idylly got m' wife's dress-pattern, but m' wife, she said there must be some mistake somewher's."

"Ther' aint any mistake, I cal'late, Gus," replied the returned traveler. "Ye see, times hev changed sence you was t' Boston twenty-five years ago. Gimp an' Hardtack keeps everythin' ye ken think up, fr'm rubber boots t' painted furnitoor sets. It's 'nough t' make a man crazy t' step foot inter their place; an' it's full as big as Square Follet's pasture piece."

"I want ter know!" ejaculated Mr. Fawcett.

"Yes, full as big," reiterated Uncle Comfort.

There was a moment's pause, and then Mr. Pettingill from his seat in front of the fire reached forward, took up the tongs and turned the forestick over, giving it a whack which started up a bright blaze.

"It aint but a few years," he said, turning to his guest with the tongs still in his hand, "sence th' city folks was pokin' fun at th' kentry stores, on accaount o' their keepin' all kinds o' merchandise."

Mr. Fawcett nodded sagely, in acquiescent silence.

"I may be all off'n th' track," remarked Uncle Comfort, in a tone that belied his modest sentiments, "but it appears t' me as ef Gimp an' Hardtack was kinder copyin' after th' kentry stores, naowadays!"

And with that he replaced the tongs, and turned the conversation to the present state of the Bushby crops.

Of Course Not.

In a 5 o'clock tea no two cups and saucers should be alike.

CHOLERA continues to claim new victims in Hamburg, and the theory that the Oriental scourge is a hot-weather pestilence is being shattered, so that even the layman are beginning to understand the facts in the case. Each passing day increases the chances of the disease being brought